

ABSTRACT

A grating (3) including first and second regions (B1 and B2) through which the light beams, having wavelengths λ_1 and λ_2 , respectively, pass, each of the regions including a region having diffraction grooves whose concavoconvex pitches are partially shifted so that a pattern is provided to cause each of the first and second light beams to have a partial phase shift. The pattern is set so that amplitudes of push-pull signals of the sub-beams are substantially cancelled in each of the light beams having different wavelengths. With this, it is possible to provide an optical pickup (i) having a plurality having different light sources in one package, (ii) capable of realizing low cost in the case in which the optical pickup carries out track detection using three beams with respect to any optical discs, such as DVDs and CDs, and (iii) capable of realizing simplifications of assembly adjustment and the pickup.